



# DEPARTMENT OF TRANSPORTATION

# NEWS

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REMARKS BY U.S. SECRETARY OF TRANSPORTATION JOHN A. VOLPE TO THE NEW YORK CHAPTERS, AMERICAN ORDINANCE ASSOCIATION AND NATIONAL SECURITY INDUSTRIAL ASSOCIATION, PLAZA HOTEL, NEW YORK CITY, MONDAY, DECEMBER 18, 1972.

Over the past several years an increasing number of companies with reputations for competence in aerospace and defense fields have started to turn their talents and attentions to the challenge of public transportation.

They have looked toward new forms of high speed ground transportation.

They are working to develop better systems for controlling our modes of transportation. And the potentials for further efforts in those directions are far from exhausted. We're just scratching the surface -- and I solicit your help.

Let's take a look first at the problems -- and the opportunities -- in public transportation. It's high time for instance, that we answer that proverbial question -- "If we can transport three men 240,000 miles to the moon, why can't we move 240,000 people three miles to the other side of town?"

This Administration is committed -- solidly -- to the vital task of improving urban mobility.

Going right back to his first year in office, back in 1969, President Nixon has strongly supported larger Federal involvement in public transportation development. The Urban Mass Transportation Assistance Act -- which I recommended, the President proposed, and the Congress enacted in 1970 -- laid the foundation for that support. And it was long overdue. In the two decades from 1950 to 1970, our urban public transportation systems lost more than seven billion riders a year. Public transportation fleets were being depleted at the rate of 25,000 buses and commuter rail cars a year.

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Maintenance fell off sharply and costs shot upward. Yet while all this was happening, the basic need for public transportation was increasing.

It was a cruel irony that the people being deprived of mobility were the ones with the least opportunity to make their plight known-- the 25 percent of our population who are too young, too old, handicapped, or too poor to afford an automobile.

They depend on public transit to get to jobs, education, medical care, and other essentials. For them, the deterioration of public transportation becomes a disaster.

And for you, the threatened loss of efficient urban transportation systems is a compelling call for government-industry action.

The Urban Mass Transportation Assistance Act of 1970 that I mentioned a moment ago put the Federal government's assistance to our cities and towns and their bus or transit systems into high gear. In the 18 month period ending last June, we provided more than one billion dollars in public transit financing; that's more than all the funds spent in the five years previous. It enabled us to save the transit systems in some 60 American cities. We've tackled the institutional problems -- encouraging communities to make their public transportation more responsive to human needs through such things as reduced fares for the elderly, lower fares overall, better schedules, better bus routes, and incentives for commuter travel. We've given urban transportation -- in cities large and small -- a new lease on life. But these are really short term, stopgap solutions to the problem of mobility in our cities. The long pull is going to require that urban transportation -- in cities large and small -- become genuinely competitive with the private automobile. The long pull is going to require that we provide fast, frequent and inexpensive service to riders -- service that is going to make them want to leave their automobiles at home.

This means we must change a lot of transportation habits, since 82 percent of all workers today depend on the motor car to get them to their jobs. And it means too, that we need more research and development, more innovative thinking, more down-to-earth application of space age capabilities. And this goes for most phases of the transportation industry -- not just public transportation in our urban areas.

We are going to have to double our transportation capacity over the next 15 years and we can't do it by duplicating our existing transportation facilities. That would be the worst way of tackling the job. We must, rather, get more efficiency out of our existing facilities. This is the reasoning behind the steady increase in research and development funds in the Department of Transportation during the past four years. Our R-and-D budget went from \$153 million in Fiscal 1970 to nearly \$400 million for Fiscal 1973. We are looking for the new and the better. And we are looking for smarter ways to use what we have.



In civil aviation, for example, we see increased dependence on automation as essential if we are to keep pace with traffic growth and avoid any recurrence of the congested skyways and terminals of a few years ago.

Our ten year plan for the development of a balanced airways system capable of meeting the projected demand for air transportation services through 1982 calls for the updating, in an evolutionary -- not revolutionary -- manner, of the third generation air traffic control system now being implemented. As you know, the President's Airport-Airways Development Act, passed in 1970, gave us the resources we needed not only to accelerate automation of the airways, but to plan for the future as well.

All 64 of the Automated Radar Terminal Systems (ARTS III) ordered in January 1970 for the Nation's busiest airports, should be in place within the next few weeks -- 37 of them already have been commissioned and are in use.

We will be continually enlarging the memory and "brain power" of these systems. At the same time, we want to increase the number of runways equipped with conventional instrument landing systems. Since 1969 the number has gone up 36 percent, from 280 airport runways to 381. And we will continue to look for cost breakthroughs and other aspects in eliminating the risk of mid-air collisions. Additionally, we are aiming for improved instrument landing systems at high density airports to bring us ever-closer to an all weather landing capability.

Another of our goals in this time frame is the introduction of a micro-wave ILS -- less susceptible than the present system to interference, siting problems and approach path limitations.

Along with these "third generation" air traffic control system goals, we are engaging in parallel activities aimed at an advanced air transportation management system -- possibly involving the use of satellites for precise aircraft management over all terrains and at all altitudes.

Studies for the definition of such a system are being funded through our Transportation Systems Center in Massachusetts. We are currently spending about three to five million dollars a year with industry in pursuit of the "fourth generation" system needed by the late 1980's to handle the anticipated volume of air traffic.

I might say just a word here about that Transportation Systems Center. Most of you here remember it as NASA's Electronic Research Laboratory from years gone by. NASA, as you know, phased it out -- and I convinced the President three years ago to let us take it over as we worked to solve earthbound transportation research problems. Much of the work done there is proof enough for me that men and women brought up in the space age are more than ready to apply their abilities to more mundane -- but no less vital -- challenges.



In our cities, we hope to see automation play a bigger role in making urban transit systems more responsive and efficient. Under the "dial-a-ride" concept, for example, a rider calls, gives his point of origin and his destination, a computer then searches out the proper vehicle, and transmits instructions. In short order, a bus is at your door or on your corner. We now have an experimental dial-a-ride system working in Haddonfield, New Jersey and we are favorably impressed with the system's potentials.

We are also looking into ways in which automation can be used both to control urban highway traffic and to provide motorists with a real-time information system. Another automation project will establish urban bus placement priority systems and enable us to make better use of exclusive urban bus lanes.

We also want to utilize automation in setting up a vessel traffic control system for our more-congested harbors and ports.

Another research and development goal is cost reduction. We want especially to cut highway costs -- both for construction and for maintenance.

A third research goal is to reduce terminal congestion -- to facilitate the flow of freight from origin to destination.

We discovered recently, in a study of a one square mile area of Brooklyn, that while 28 trucks a day could carry into that area all the bulk goods needed to sustain the economy, it took no fewer than 4,200 trucks a day to complete the distribution cycle within that one square mile. Such inefficiency is appalling! The typical intra-urban truck is used effectively only four hours a day. The rest of the time it is bogged down in traffic -- or tied up at delivery, pick-up or transfer points. Certainly the cause of goods distribution could be helped by automation, along with (of course) better means of programming and controlling traffic flow.

A fourth research and development concern relates to environmental protection and transportation safety. The need for "cleaner," more efficient engines is self-evident, and the industry that turns that trick will have a brilliant future to say the least. We must also do more in the future to guard against oil spills and to conserve our energy resources.

But we also look to the fruits of research and development to further reduce the risks of travel. We are developing experimental safety vehicles -- I am taking delivery of the Ford safety vehicle tomorrow in Washington -- and we want to pack more safety into our highway designs.

Our sixth research and development effort is the one that perhaps has the most glamour --new ground passenger systems. And here we are farther down the road. We have several new systems in test phases.



One that is now in place -- and almost operational -- is a new Personal Rapid Transit System, perhaps best described as a "horizontal elevator." Push a button; the vehicle picks you up; push another button -- it takes you to your stop. This system would seem to be most applicable in dense, heavily congested urban core areas.

I might note that the technology of laying an elevator system down on its side wasn't that tricky. The hard part was creating an efficient demand-response control system; but intensive research, both within the Department and among a sizeable number of private industries (mostly aerospace firms) made the system feasible and workable. We've dedicated an experimental PRT System in Morgantown, West Virginia, and have announced a demonstration project for a similar system in downtown Denver.

I am also very pleased with the progress in our Linear Induction Motor Research Vehicle. This example of a new propulsion system rides astride an aluminum rail 22 inches high. In August it was run at 188 miles-per-hour -- the highest speed recorded for a magnetically propelled vehicle. Data from that experiment is now being evaluated. We hope to bring it up to 250 miles-per-hour in future tests.

Another experimental program involves the High Speed Tracked Air Cushion Vehicle -- or "TACV." This vehicle operates in a specially prepared guideway, riding on a thin cushion of air; it is expected to attain speeds up to 300 miles-per-hour. Just last spring, you may recall, we had a roll-out ceremony for the first Air Cushion Vehicle at the Grumman plant on Long Island. It's at our Pueblo, Colorado test site now.

The goals I have mentioned represent a few of the specifics in our "urban apollo" program, which has as its goal the attainment of a truly balanced transportation system -- affording the easy movement of people and goods between, through, and within our cities and communities.

I would hope you will approach the transportation challenge of the 70's and 80's with enthusiasm and with a sense of adventure. There is much work to be done -- there are tremendous problems to be resolved -- but there will also be great returns to those who solve them.

We need the talents and the technologies that the people of American industry possess in such abundance. Such talent has served us in good stead in challenging times down through our history. I am confident it will serve our contemporary transportation needs just as faithfully. In my four years as Secretary of Transportation, I have found our Nation's transportation industry to be more than an ally -- it's been a partner in progress. Industry people are the strong right arm of government in making policies work and programs produce. I know that my successor, and all the people of America, can count on you to make transportation better tomorrow than it is today -- and the day after tomorrow, better still.

Thank you.